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EVALUATION OF THE COMMUNICATION SKILLS CENTERS PROJECT, SPRING SEMESTER AND SUMMER 1966.

DETROIT PUBLIC SCHOOLS, MICH.

PUB DATE FEB 67

EDRS PRICE MF-$0.25 HC-$1.68 40P.

DESCRIPTORS- *READING PROGRAMS, *READING ACHIEVEMENT, *STUDENT ATTITUDES, *INSERVICE TEACHER EDUCATION, *ACHIEVEMENT, FEDERAL PROGRAMS, READING CENTERS, REMEDIAL READING, DISADVANTAGED YOUTH, READING TESTS, PROGRAM EVALUATION, QUESTIONNAIRES, DATA, PUBLIC SCHOOLS, PRIVATE SCHOOLS, BEHAVIOR CHANGE, COMMUNICATION SKILLS CENTERS PROJECT, DETROIT, MICHIGAN, STANFORD READING TEST

THIS REPORT DESCRIBES THE 1965-66 ACTIVITIES OF AN ELEMENTARY AND SECONDARY EDUCATION ACT, TITLE I PROJECT WHICH PROVIDES PUBLIC AND NONPUBLIC SCHOOL EDUCATIONALLY DISADVANTAGED PUPILS IN GRADES FOUR TO 12 WITH SPECIAL REMEDIAL READING SERVICES. AS A PART OF THIS PROJECT, THREE 2-WEEK SUMMER WORKSHOPS OFFERED INSERVICE TRAINING IN REMEDIAL READING INSTRUCTION. DATA FROM THE STANDARDIZED READING TESTS WHICH WERE ADMINISTERED TO PROJECT PUPILS BOTH BEFORE AND AFTER THE READING THERAPY INDICATED THAT THEIR READING GAINS WERE GREATER THAN WOULD BE EXPECTED FOR NORMAL-ACHIEVING PUPILS. MOREOVER, ACCORDING TO THE QUESTIONNAIRES ANSWERED BY A SAMPLE OF THE PUPILS' CLASSROOM TEACHERS, THE PROJECT PUPILS IMPROVED THEIR REGULAR SCHOOL ATTITUDE, EFFORT, AND ACHIEVEMENT. THE TEACHERS WHO PARTICIPATED IN THE SUMMER WORKSHOPS RATED THEIR TRAINING HIGHLY. IT IS FELT THAT THESE EVALUATIONS, OBTAINED AT THE END OF THE FIRST YEAR OF OPERATION, MEASURE ONLY SHORT RANGE EFFECTS AND THAT ADDITIONAL EVIDENCE IS NEEDED OF THE LONGER RANGE EFFECTS OF THE PROJECT ON PUPILS' READING ACHIEVEMENT AND OTHER LEARNING GOALS. THE OPERATIONAL COST OF THIS PROJECT IS ESTIMATED TO BE $390 PER PUPIL. (LB)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Detroit Public Schools

SUMMARY OF PROJECT EVALUATION
(ESEA, TITLE I)

Research and Development
February, 1967

**Title** Evaluation of the Communication Skills Centers (CSC) Project

**Purpose** To evaluate the project's effectiveness in providing special remedial reading services to educationally disadvantaged children from selected public and non-public schools in Detroit

**Investigators** The Research and Development Department, Program Evaluation Section

**Period** October, 1965 through August, 1966

**Subjects** 1,693 pupils in grades 4-12 from 57 public schools and 22 non-public schools in the project service area

**Procedures** Retarded readers from participating schools were provided diagnostic and remedial reading services by teachers specializing in this work at 5 project centers. Each CSC pupil was pre- and posttested on a standardized reading achievement test. A sample of the teachers having CSC students in project feeder schools was interviewed to assess effects of project participation on the children's attitudes and performance in their regular school classrooms. Summer workshops conducted by CSC personnel for teachers from project feeder schools were evaluated by the workshop participants. A questionnaire was administered to CSC personnel; several principals and teachers of project feeder schools were interviewed; and project records were examined.

**Analysis** The means (averages) of reading achievement test score gains and of numbers of months enrolled were computed for the various groups of pupils served. Responses to interview questions and to those on questionnaires were categorized by content analysis and tabulated to study the frequencies of responses.

**Findings** Means of gains in reading achievement by CSC pupils at all school levels were greater than would be expected for normal-achieving pupils.

The majority of children in a sample of CSC pupils improved in their attitudes, efforts, and achievements in their regular school classrooms as reported by their teachers.

Most of the regular school teacher participants in the CSC summer workshops rated highly the value of their workshop experiences.

There are needs for clarification of CSC policies, procedures, and roles; for improved inservice education for staff members; and for improved cooperation with feeder school personnel.

Conclusions

During its initial operational phase of operation the project made progress toward the attainment of its major objective--to reduce the extent of retardation in reading among educationally disadvantaged pupils in grades 4-12 of Detroit schools.

The benefits observed thus far have been short-range effects; more evidence is needed of longer range effects.

# EVALUATION OF THE

# COMMUNICATION SKILLS CENTERS PROJECT

## SPRING SEMESTER AND SUMMER, 1966

Research and Development Department
Program Evaluation Section
Detroit Public Schools
February, 1967

# EVALUATION OF THE COMMUNICATION SKILLS CENTERS PROJECT[1]

## Background of the Project

### The Problem of Reading Retardation Among Inner-City School Children

Results of Detroit's regularly scheduled achievement tests show that large numbers of inner-city school children are severely retarded in reading ability, and that the older the child, the greater is the extent of retardation. When serious reading deficiencies develop and persist, these children often meet frustration and failure in their school work. Complicating the problem is the fact that very few teachers are able to provide effective remedial reading instruction in the regular classroom situation. Indeed, the kind of individual diagnosis and teaching necessary to remedy serious reading deficiencies is virtually impossible in classes of thirty to forty children. Consequently, the retarded reader generally becomes more retarded, more discouraged, and less able to achieve his potential for scholastic achievement. These conditions clearly indicate a need for improvement of the quality of remedial reading instruction available to disadvantaged children and youth in Detroit.

### Purposes of the Communication Skills Centers Project

In an effort to meet the need for improved remedial reading therapy for Detroit's disadvantaged school children, the Communication Skills Centers Project (CSC) was conceived and developed. Five special CSC centers were established to provide intensive diagnostic and remedial reading services for pupils in grades 4 through 12 who were seriously retarded in reading achievement. An important

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[1]Funded under the Elementary and Secondary Education Act, Title I

additional function of the centers was to provide counseling services for pupils whose reading disabilities appeared to be related to underlying problems of personal or social adjustment.

The objectives of the CSC project as stated in the application for federal funds are as follows:

General Objectives

1. To reduce measurably the extent of retardation in reading for educationally deprived pupils from low-income families in grades 4-12 of Detroit schools.

2. To gain further knowledge and skills for the effective operation of communication skills centers providing remedial services for large numbers of disadvantaged children and youth.

Specific Objectives

1. To extend diagnostic service to a large number of pupils who are severely retarded in reading.

2. To provide thorough remedial instruction in reading and related communication skills.

3. To provide counseling, psychological and medical (including psychiatric) services for pupils whose reading problems require such service.

4. To strengthen the reading program in participating schools through communication with the centers.

5. To gain additional knowledge about the effectiveness of numerous methods and materials of remediation of reading deficiencies.

6. To gain new skills in maximizing the effectiveness of the personnel giving special services.

7. To increase the number of pupils who complete high school with greater employability.

A separate facet of the CSC project was an exploratory effort to determine the benefits to be derived from exposing preschool language-retarded children to a daily program of intensive language therapy, using special materials and special education personnel. This facet of the CSC project was called the Language Retardation Unit. A description of the unit and a report of teacher evaluations of its results are presented in a separate evaluation report.

The Operation of the Project

The CSC project was funded for the period from October 13, 1965 to August 31, 1966, through a grant under the Elementary and Secondary Education Act, Title I. Five CSC centers were established in three administrative regions of the Detroit Public Schools. There was one center in each of the three regions to accommodate elementary and junior high school pupils. Centers for senior high school pupils were located in two of the regions. (A center for senior high youth from the third region opened in September, 1966.) The three elementary-junior high centers were housed in special transportable units which were installed on the school grounds at the Berry, Campbell Annex, and Winterhalter Schools. One senior high center operated in transportable units at the Mackenzie High School, and the other was housed in the Murray High School. Sub-centers were operated in classrooms at Northeastern High School and at three elementary schools.

The CSC central office staff included the project director, 3 region coordinators, and 3 clerk typists. The staff at each CSC center included the following personnel:

1 junior administrative assistant,
6 remedial reading teachers,
1 reading diagnostician,
1 psychologist (half-time),
1 social therapist,
1 clerk typist, and
1 lay aide.

CSC pupils were selected from 57 public and from 22 non-public schools on the basis of referrals initiated by teachers or principals at these participating schools. Elementary and junior high pupils were transported to and from the centers on CSC busses. Senior high pupils walked to the centers where they were enrolled.

During the regular school year the elementary and junior high pupils attended two 60 minute CSC classes per week and the senior high students attended four 45 minute sessions per week. In the summer session most students attended one 60 minute class per day, five days per week.

Through the regular school year CSC classes met on Monday, Tuesday, Thursday, and Friday of each week. Teachers at the elementary-junior high centers taught four 60 minute classes per day, and senior high center teachers taught five 45 minute classes per day. Every CSC teacher had two periods per day for preparation, evaluation, and consultation with the CSC specialists. Wednesdays were devoted to staff planning, committee meetings, and inservice education activities. Summer session CSC classes met during the mornings only, five days per week. Each teacher taught three 60 minute classes per day and had one preparation period.

Remedial reading therapy at the CSC centers began with a diagnosis of the pupils' reading deficiencies. Following this, pupils were placed in small classes (6 to 10 pupils per class) for instruction. Using a variety of specialized remedial reading materials and equipment, CSC teachers strove to individualize instruction to meet each pupil's needs. Children whose reading disabilities appeared to be related to underlying problems of personal or social maladjustment were referred to the social therapist or to the psychologist for further diagnosis and counseling.

During the summer of 1966, CSC personnel conducted three two-week workshops for 47 regular classroom reading teachers from project feeder schools.[1] The purpose of these workshops was to provide inservice training in remedial reading instruction for disadvantaged children. Workshop activities were integrated with regular CSC program of services to pupils.

Numbers of Disadvantaged Children Served

During the second semester of the 1965-66 school year and the summer of 1966, a total of 1,693 children in grades 4 through 12 were given remedial instruction at CSC centers. Numbers of public and non-public school participants by grade span were as follows:

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[1] Project feeder schools are those schools which send pupils to CSC centers for remedial instruction. Hereafter, such schools are referred to as feeder schools.

| Source of CSC Pupils | No. of Schools | Numbers of Pupils by Grade Span | | | Total |
|---|---|---|---|---|---|
| | | Grades 4-6 | Grades 7-9 | Grades 10-12 | |
| Public Schools | 57 | 789 | 325 | 310 | 1424 |
| Non-Public Schools | 22 | 148 | 62 | 59 | 269 |
| Total | 79 | 937 | 387 | 369 | 1693 |

These figures show that the CSC project's selection policy gave highest priority to service for elementary school pupils. This policy would seem sound in that younger pupils have more future school years during which improved reading skills can enhance their educational achievement. Also, early remediation of a child's reading deficiencies may lessen the likelihood of his dropping out of school before he completes his junior or senior high education.

## Chronology of Events During the Early Stages of Development of the Project

In November, 1965, the CSC project director was appointed. His first responsibility was to expedite preparations for the operation of the project. This involved selection and assignment of staff; procurement of the transportable housing units; purchasing of special materials, equipment, and supplies; arranging for transportation of CSC pupils; coordinating plans for operating procedures with feeder school administrators; and planning the CSC program. All of these complex tasks had to be accomplished in a short time so that services to pupils could be begun as early as possible during the spring semester. The CSC staff was assigned to the project in February, 1966. Since at that time none of the centers was ready for occupancy, the staff was temporarily housed in vacant rooms at several schools. During the interim, prior to the opening of the centers, CSC personnel engaged in preservice education activities; planning for transportation, scheduling, and instruction; development of instructional materials; and testing and screening potential CSC enrollees. The first senior high school center to become operational opened at the end of February, 1966. The first operational

elementary-junior high center opened at the end of March. By the end of April the remaining three centers had opened and begun serving pupils.

The Research and Development Department was assigned the responsibility for evaluating the project. Evaluation service began in May, 1966.

## The Evaluation Plan

The plan for evaluation of the CSC project was designed to accomplish two major aims:

1. to determine the extent to which project outcome objectives were attained (product evaluation);

2. to identify specific strengths and weaknesses in project operations for guidance in improving the project (process evaluation).

The product evaluation sought the following kinds of evidence:

evidences of improvements in reading achievement attained by CSC pupils--as measured by pre- and posttest scores on standardized reading achievement tests;

evidences of the effects of CSC treatments on CSC pupils' achievement and behavior in the regular classroom situation--as determined by interviews with regular classroom teachers; and

evidences of the values of CSC summer workshops to participating regular classroom teachers--as determined by a questionnaire administered to all participants.

The process evaluation sought evidences of specific strengths, weaknesses, and needs for improvement in various aspects of project operations. Such evidences were obtained from the following sources:

questionnaires filled out by members of the CSC staff,

interviews with regular classroom teachers from schools participating in the project, and

interviews with principals of schools participating in the project.

## Product Evaluation

### Gains in Reading Achievement by CSC Pupils

The appropriate levels of the Stanford Reading Test were administered as pre-tests to all CSC pupils at, or shortly before, the time of their enrollment at a

project center. The Intermediate I or II level of the test was used with elementary school pupils; the Intermediate II or the Advanced level with secondary school pupils. Posttests were administered at the end of the spring semester and at the end of the summer, 1966, session. Each pupil was posttested on the same level of the Stanford Reading Test as was used for his pretest. All pre- and posttests were administered by CSC personnel. Most of the pretests were hand scored by project staff members. Most of the posttests were machine scored by the Research and Development Department. Summaries of the reading test score data (for all CSC pupils for whom both pre- and posttest scores were obtained) are presented separately for elementary, junior high, and senior high pupils in Tables 1, 2, and 3, respectively.

Table 1

Means of Test Score Gains in Reading Achievement Made by Elementary School Pupils Attending the Communication Skills Centers in 1966

| Attendance Period | Stanford Reading Test[1] Sub-Tests | No. of Pupils Tested | Means of Test Scores in Grade Equivalent Units | | | Means of Numbers of Months Enrolled |
|---|---|---|---|---|---|---|
| | | | Pre-test | Post-test | Gain in Months | |
| Spring Semester | Word Meaning | 313 | 3.37 | 3.67 | 3.0 mo. | 1.7 |
| | Paragraph Meaning | 313 | 3.30 | 3.53 | 2.3 mo. | 1.7 |
| Summer Session | Word Meaning | 113 | 3.27 | 3.51 | 2.4 mo. | 1.5 |
| | Paragraph Meaning | 110 | 2.85 | 3.14 | 2.9 mo. | 1.5 |
| Both Spring and Summer | Word Meaning | 41 | 3.72 | 4.08 | 3.6 mo. | 4.1 |
| | Paragraph Meaning | 41 | 3.61 | 3.78 | 1.7 mo. | 4.1 |
| Total | Word Meaning | 467 | 3.38 | 3.67 | 2.9 mo. | 1.9 |
| | Paragraph Meaning | 464 | 3.22 | 3.46 | 2.4 mo. | 1.9 |

[1]Some pupils were tested on the Intermediate I level of the test; others, on the Intermediate II level.

The data in Table 1 for the spring semester group of elementary school CSC pupils indicate that these pupils achieved a mean gain of three school months in grade equivalent units on the Word Meaning test during an average of less than

two months of enrollment in the CSC program. Their mean gain on the Paragraph Meaning test was over two months. The expected mean test score gain for normal-achieving elementary school pupils over a two-month period would be two months in grade equivalent units. The children enrolled in the CSC program have, of course, not been normal achievers. It would appear, therefore, that their mean reading achievement gain was greater than what would have been expected of them.

The data in Table 1 also show that the gains in means of scores for the summer session pupils were above expected gains for normal achievers.

The group of 41 pupils attending both the spring semester and summer session classes at the CSC centers attained mean gains of 3.6 months (in grade equivalent units) on the Word Meaning test, and 1.7 months on the Paragraph Meaning test. However, since the average period of attendance for this group was about 4 months, these gains were less than would be expected for normal achievers. Further study may reveal reasons for their doing less well than did pupils who attended CSC classes for shorter periods of time.

For the total group of elementary school pupils, the means of the pretest scores (in grade equivalent units) were 3.4 (3.38) on the Word Meaning test and 3.2 (3.22) on the Paragraph Meaning test. These means are about equivalent to the expected performance of typical children in the first part of the third grade. Since the total group of elementary school CSC pupils consisted of about equal numbers of fourth, fifth, and sixth grade pupils, it is evident that they were considerably retarded in reading achievement when enrolled in the program. Their posttest score means of 3.7 (3.67) and 3.5 (3.46) show that the amount of retardation has been slightly reduced.

Table 2

Means of Test Score Gains in Reading Achievement Made by Junior High School Pupils Attending the Communication Skills Centers in 1966

| Attendance Period | Stanford Reading Test[1] Sub-Tests | No. of Pupils Tested[2] | Means of Test Scores in Grade Equivalent Units | | | Means of Numbers of Months Enrolled |
|---|---|---|---|---|---|---|
| | | | Pre-test | Post-test | Gain in Months | |
| Spring Semester | Word Meaning | 37 | 4.90 | 5.19 | 2.9 mo. | 1.3 |
| | Paragraph Meaning | 154 | 5.47 | 5.87 | 4.0 mo. | 1.9 |
| Summer Session | Word Meaning | 16 | 4.24 | 4.46 | 2.2 mo. | 1.4 |
| | Paragraph Meaning | 28 | 4.20 | 5.03 | 8.3 mo. | 1.5 |
| Both Spring and Summer | Paragraph Meaning | 13 | 5.25 | 6.02 | 7.7 mo. | 4.3 |
| Total | Word Meaning | 53 | 4.70 | 4.97 | 2.7 mo. | 1.3 |
| | Paragraph Meaning | 195 | 5.27 | 5.76 | 4.9 mo. | 2.0 |

[1]Some pupils were tested on the Intermediate II level of the test; others on the Advanced level.

[2]The Advanced level of the Stanford Reading Test, taken by many pupils, is Paragraph Meaning test only; it does not include a Word Meaning sub-test.

Table 2 presents reading achievement test results for junior high school pupils enrolled in the CSC program during different periods in 1966. The data for the total group show that 53 of these pupils achieved a mean gain of 2.7 school months in grade equivalent units on the Word Meaning test during an average enrollment period of 1.3 school months. The data also show that 195 junior high pupils attained a mean gain of 4.9 school months in grade equivalent units on the Paragraph Meaning test during an average of 2.0 months in CSC classes. These results show that the mean gains in reading achievement for the junior high pupils were more than twice as high as would be expected for normal achievers (without special treatment) over similar periods of time.

The mean pretest grade equivalent scores for the total junior high group (4.70 in Word Meaning; 5.27 in Paragraph Meaning) reveal the high degree of reading

retardation which characterized the average junior high pupil at the time of his enrollment in the project.

Table 3

Means of Test Score Gains in Reading Achievement Made by Senior High School Pupils Attending the Communication Skills Centers in 1966

| Attendance Period | Stanford Reading Test[1] Sub-Tests | No. of Pupils Tested[2] | Means of Test Scores in Grade Equivalent Units | | | Means of Numbers of Months Enrolled |
|---|---|---|---|---|---|---|
| | | | Pre-test | Post-test | Gain in Months | |
| Spring Semester | Word Meaning | 47 | 6.43 | 6.32 | -1.1 mo. | 2.0 |
| | Paragraph Meaning | 137 | 6.61 | 7.23 | 6.2 mo. | 3.0 |
| Summer Session | Word Meaning | 29 | 6.04 | 6.44 | 4.0 mo. | 1.2 |
| | Paragraph Meaning | 43 | 6.69 | 6.95 | 2.6 mo. | 1.4 |
| Both Spring and Summer | Paragraph Meaning | 4 | 5.45 | 7.23 | 17.8 mo. | 4.7 |
| Total | Word Meaning | 76 | 6.28 | 6.37 | .9 mo. | 1.7 |
| | Paragraph Meaning | 184 | 6.60 | 7.16 | 5.6 mo. | 2.4 |

[1]Some pupils were tested on the Intermediate II level of the test; others on the Advanced level.

[2]The Advanced level of the Stanford Reading Test, taken by many pupils, is a Paragraph Meaning test only; it does not include a Word Meaning sub-test.

Table 3 presents the evidence of reading achievement progress made by senior high CSC pupils. The mean pretest scores provide evidence that the average senior high school pupil was reading at about the sixth grade level when he enrolled at a CSC center. The data further indicate that 184 senior high pupils attained a mean gain of 5.6 months in grade equivalent units on the Paragraph Meaning sub-test during an average enrollment period of 2.4 months. This gain is more than twice the improvement which would be expected for normal achievers over that period of time. The figures also show that for 76 high school pupils the mean gain on the Word Meaning test was less than one month in grade equivalent units after an average enrollment period of 1.7 months. This gain was substantially less than

would be expected for normal-achieving pupils. Further inspection of Table 3 reveals that the low mean gain on the Word Meaning test for the total senior high group was due mainly to a loss in mean grade equivalent units registered by pupils in the spring semester group.

Only one of the two senior high CSC centers administered the Intermediate II level of the Stanford Reading Test, which includes the Word Meaning sub-test. It may be noted that, whereas the spring semester group at this center showed a negative gain on the Word Meaning test, the summer session group at the same center attained a relatively high positive gain on this sub-test.

There were two major differences between the two senior high centers. The center which used the Intermediate II level of the Stanford Reading Test serves a community of considerably lower socio-economic level than does the other center; also its classes are conducted in regular high school classrooms, whereas the other center operates in transportable units built especially for CSC services.

Comparisons of totals given in Tables 1, 2, and 3 show that

> in general, the higher the school level of the CSC pupils, the greater is the extent of reading retardation;
>
> secondary-school CSC pupils made greater gains in the means of their scores on the Paragraph Meaning sub-test than did the elementary school CSC pupils; and
>
> secondary-school CSC pupils tended to make much greater gains on their Paragraph Meaning scores than on their Word Meaning scores, whereas the elementary school CSC pupils tended to make slightly greater improvements on the Word Meaning sub-test than on the Paragraph Meaning sub-test.

The evidence of gains in reading achievement by CSC pupils supports a conclusion that progress was made toward the attainment of the project's first general objective--to reduce the extent of retardation in reading for educationally deprived pupils from low-income families in grades 4-12 of Detroit schools. The second specific objective of the project was to provide thorough remedial instruction in reading and related communication skills. The evidence indicates that

generally the remedial reading instruction provided was sufficiently thorough to promote reading achievement gains beyond normal expectations. No evidence was obtained relative to improvements in communication skills other than reading.

Effects on Pupil Behavior and Achievement in the Regular Classroom

The stated objectives of the project did not explicitly mention an aim to improve CSC pupils' attitudes, behaviors, and achievements in their regular school classrooms. However, this goal seemed to be an implicit objective of the project, and an attempt was made to obtain evidence of the extent to which it was attained. Twelve regular elementary school classroom teachers of eighteen CSC pupils were interviewed at the end of the second semester, 1966. Interviews were conducted at two schools served by a CSC center on Detroit's west side and at two schools served by an east side center. The selection of specific teachers was done solely on the basis of availability of regular classroom teachers for interviewing. All except two of the teacher respondents were language arts teachers. The four interview questions pertinent to this discussion and the resultant findings were as follows:

Question 1: "Since (name) has been enrolled in the CSC program, have you noticed any changes in his/her attitude toward school and learning?"

Findings: Ten of the eighteen children were reported to have shown definite improvements in attitudes toward school and learning. None was reported to have shown poorer attitudes. In discussing attitude changes, teachers mentioned that ten showed increased interest in school work; that five had participated in classroom discussions to a greater extent; that three, who previously had been discipline problems, had improved in classroom behavior; and that two had shown major improvements in self-confidence.

Question 2: "Since (name) has been enrolled in the CSC program, have you noticed any changes in the quality of his/her school work?"

Findings: Twelve of the eighteen children were reported to have improved their classroom work since their enrollment at a CSC unit. None was reported to have done poorer classroom work. Teachers mentioned that six had shown noticeable improvement in reading; that four were doing better in other subjects, and that two had demonstrated better work habits. One teacher said, "During that last two weeks of the semester (name) read orally with expression and confidence. He had never done so before."

Question 3: "Since (name) has been enrolled in the CSC program, have you noticed any changes in his/her interest in reading for pleasure?"

Findings: Eight of the eighteen children were reported to have shown greater interest in reading for pleasure. Three were reported to have recently begun asking to take literature books home from school, whereas they never had done so before. One teacher said that the child "read at every opportunity in class toward the end of the semester and asked for help on words he didn't know."

Question 4: "Do you feel that the benefits of the program to (name) justify his/her loss of time from the regular school program?"

Findings: Teachers reported that for sixteen of the eighteen children, results were well worth the loss of time from the regular school program.

The evidence obtained from interviews of regular classroom teachers of a small sample of CSC pupils indicates that, during their participation in the project, a majority of the eighteen children showed noticeable improvements in their attitudes, efforts, and quality of school work in their regular school classrooms.

## Effectiveness of Summer Workshops for Teachers from Participating Schools

The fourth specific objective of the CSC project was to strengthen the reading program in participating schools through communication with the centers. In the attempt to meet this objective, CSC personnel conducted during the summer of 1966 a series of three two-week workshops for language arts teachers from project feeder schools. Participants were assigned to each of the five operating CSC centers for inservice training in remedial reading instruction. A total of 47 teachers (37 public school and 10 non-public school) attended the workshops. They worked closely with the personnel at the centers, who served as consultants. Throughout the workshops, the regular CSC program was continued without interruption.

The objectives of these workshops were (1) development of an awareness of the function of the CSC units in relation to the total reading problem, and (2) improvement of understanding and skill in the use of diagnostic, remedial, and evaluative techniques and materials.

A major feature of the workshops was that each participating teacher worked with pupils under the supervision of a CSC teacher and prepared for one pupil a detailed program of instruction which was based on results of diagnostic tests, comments of the social therapist and psychologist, and recommendations of the reading diagnostician.

During the final session of each workshop, an evaluation discussion was held and each participant filled out a brief workshop evaluation questionnaire. Comments during the evaluation discussions indicated that participants felt generally that their workshop experiences were very worthwhile and that workshop objectives were attained to a high degree. They suggested several improvements for future workshops. These were reported to all CSC personnel. They also offered several suggestions of ways by which CSC personnel could help them meet the needs of individual children in the regular school program. Analyses of responses to each workshop evaluation questionnaire were made and reports of findings were distributed to each CSC center to provide guidance for the improvement of subsequent workshops.

In answering the question, "Of how much value were the workshop experiences to you (in terms of your interests, needs, and goals)?" teachers responded with the following frequencies:

| Workshop Activity | Frequencies of Teacher Ratings | | |
|---|---|---|---|
| | Low or Very Low Value | Moderate Value | High or Very High Value |
| Diagnosis of reading difficulties of one pupil | 4 | 2 | 39 |
| Development of remedial program for one pupil | 2 | 11 | 32 |
| Programmed learning approach session | 8 | 9 | 28 |

Teachers responded to the question, "To what extent do you think you will actually be able to use in your classes the techniques you have learned in the workshop?" as follows:

| Techniques | Frequencies of Expected Classroom Usage | | |
|---|---|---|---|
| | Little | Some | Much |
| Diagnostic techniques | 3 | 18 | 24 |
| Individual remedial techniques | 5 | 17 | 23 |
| Group remedial techniques | 6 | 15 | 24 |

In addition to these responses, teachers wrote comments on their questionnaires generally indicating that they regarded as highly beneficial: (1) the opportunity to learn about CSC and its function; (2) theory-practice concept of the workshop; (3) the opportunity to learn about testing materials, specialized materials and equipment, and new approaches to remedial reading instruction; and (4) the contributions of the CSC specialists (the reading diagnostician, the psychologist, and the social therapist). One teacher commented, "You have generated a great deal of enthusiasm in the workshop participants. I am confident that it will carry over into the classroom."

While the ultimate test of the true value of the workshops will occur in the regular classrooms of the participants, the available evidence supports a conclusion that the summer workshops have made a substantial contribution toward the attainment of the CSC objective--to strengthen the reading program in participating schools through communication with the centers.

## Limitations of the Product Evaluation

The report on gains in reading achievement by CSC pupils is limited to some gross findings. Measures of the variance in test scores were not determined, and tests of the significance of differences between means of pretest and posttest scores were not computed. No analyses were made of relationships between reading achievement gains and such factors as scholastic aptitude, number of CSC classes attended, and pupils' grade levels. All of these important factors and relationships will be assessed as a part of the evaluation of the continuing project during the school year 1966-67.

Validity of the reading achievement test score means reported in Tables 1, 2, and 3 was limited to some extent because several of the group means were derived from scores obtained on two different levels of the Stanford Reading Test. Each individual child was given his pretest and posttest on one level of the test, but not all children in each school grade were tested on the same level of the test. At some centers the choice of the test levels administered was made strictly according to the pupils' actual grade placements in school. At other centers pupils were tested on the test level considered appropriate for their reading ability levels. In spite of these circumstances, it is doubtful that there were significant losses in the validity of the test score means.

One of the specific objectives of the project was to provide counseling, guidance, and remedial (including psychiatric) services for pupils whose reading problems require such service. While reports from the centers indicate that these services were provided, no evidence was obtained relative to the number of CSC pupils receiving the services or the effectiveness of the services.

No evidence was obtained of the extent to which the project met its seventh specific objective, i.e., to increase the number of pupils who complete high school with greater employability.

## Recommendations Based on Product Evaluation Findings

The evidence obtained from interviews with several regular classroom teachers of the CSC pupils suggests that one of the most valuable project outcomes may be the improvement of pupils' attitudes, efforts, and achievements in their regular school classes. It may be that the experience of receiving special help and attention in CSC classes helps children develop greater self-confidence and desire to succeed in school. It is strongly recommended that both CSC personnel and teachers in regular school classes use every opportunity to promote this kind of improvement and to use it for the pupil's advantage.

Increased motivation for success in school may very well be of greater lasting benefit to the pupil than improved reading skills gained through attendance at CSC classes.

Results of the evaluation of the CSC summer workshops indicate that these workshops made a valuable and practical contribution to the inservice education of participants. It is recommended that similar workshops be conducted again during the summer of 1967. Because only a relatively small number of teachers can be accommodated at workshops of the kind conducted at the CSC centers during a summer session, it is recommended that consideration be given to the feasibility of providing opportunities for reading teachers from all disadvantaged area schools to attend similar workshops at CSC centers during the regular school year. Ideally, such workshops would be held during regular school hours, since holding them during after school hours or on Saturdays, though less costly, would not permit participants to work directly with CSC pupils under the guidance of staff members (a major strength of the summer workshops according to participants' evaluations). Workshops during school hours might be possible, at least, during those times of the year when demands for substitute service are lowest. The scheduling of teachers for participation in the workshops could be done so that only one teacher from any one school would be released to attend a workshop at any given time. Benefits of such workshops would be well worth the cost in substitutes' pay, if teachers returned from the workshops with new and improved skills in the teaching of reading and with renewed enthusiasm for their work. The evidence from the evaluation of the last summer's CSC workshops is that this is a reasonable expectation.

## Process Evaluation

### Evidences Obtained from CSC Staff Questionnaires

At the end of the summer program an evaluation questionnaire was sent to all CSC personnel except the director and the region coordinators. The complete questionnaire is presented in the appendix of this report. The purpose of this questionnaire study was to obtain staff opinions and suggestions concerning various aspects of project operations for the year 1965-66. The questionnaire consisted of 20 questions, 9 of which provided for responses to rating scales. All 20 questions requested staff members' comments and suggestions. Completed questionnaires were returned directly to the project evaluator in self-addressed envelopes by U.S. mail. Altogether, 69 questionnaires were sent out; 38 were filled out and returned. The numbers of CSC staff members in different classifications to whom questionnaires were sent and the numbers who returned the questionnaires are as follows:

| Classification | Number of Questionnaires Sent | Returned |
|---|---|---|
| Junior Administrative Assistant | 6 | 5 |
| Remedial Reading Teacher | 43 | 22 |
| Reading Diagnostician | 7 | 3 |
| Social Therapist | 9 | 7 |
| Psychologist | 4 | 1 |
| Total | 69 | 38 |

The specific questions which included rating scales and the frequencies of ratings chosen on a 5 point scale (1 = unsatisfactory, 5 = excellent) are given in the ensuing discussion. While the low ratings (1 and 2) and the high ratings (4 and 5) are combined for the frequencies shown, the means of the rating choices were computed on the basis of the 5 point scale. Summaries of the more frequently given comments and suggestions requested of staff members are also given in the following presentation of questionnaire findings.

Personnel Organization. "How well was the CSC personnel organization suited to the efficient achievement of project purposes? (Personnel organization here refers to the number and kind of CSC personnel assigned to the centers.)" Answers to this question from personnel in the different classifications are distributed as shown:

| Classification | Frequencies of Ratings | | |
|---|---|---|---|
| | Poor | Fair | Well |
| Junior Administrative Assistant | 1 | 1 | 3 |
| Remedial Reading Teacher | 1 | 5 | 16 |
| Reading Diagnostician | | | 3 |
| Social Therapist | 1 | 2 | 4 |
| Psychologist | | | 1 |
| Total | 3 | 8 | 27 |

The mean of the ratings from all respondents is 3.9 which is close to the "Well" suited category for personnel organization, though it should be noted that 11 respondents (29%) gave a lower rating. Reasons for the lower ratings are implied in respondents' comments written in response to the same question and to others relating to CSC personnel organization and administration as paraphrased and summarized here:

> The organization is top heavy with administrative personnel; having 3 region coordinators is unnecessary (6 respondents).
>
> A full time speech therapist is needed at each center (3 respondents).
>
> Teacher aides should be added to the staff (2 respondents).
>
> The position of region coordinator should be eliminated or the role reexamined and redefined (6 respondents).
>
> There is a real need for clarification of the roles of the CSC specialists--reading diagnostician, social therapist, and psychologist (6 respondents).
>
> There should be more communication between CSC teachers and feeder school teachers of CSC pupils (3 respondents).
>
> There is need for more precise definitions of project aims, policies, and procedures (8 respondents).

The junior administrative assistants should have a greater voice in the determination of CSC policies and procedures (4 respondents).

More CSC teachers should be included on project planning and policy making committees (8 respondents).

There should be more opportunities for all staff members to express ideas and opinions prior to the making of policy decisions (6 respondents).

Questionnaires might be used occasionally to obtain staff member opinions and suggestions (2 respondents).

Regularly scheduled staff planning meetings should be held at each center (2 respondents).

Procedures for Referring and Accepting Pupils. "How would you rate present procedures for referring pupils to the CSC program?" and "How would you rate present procedures concerning acceptance of pupils into the CSC program?" were two questions on the questionnaire. The distributions of ratings given in response to these two questions were almost identical. Therefore, the distribution of ratings on only the first is given to indicate staff reactions to procedures for both referral and acceptance of pupils into the CSC program:

| Classification | Frequencies of Ratings | | |
|---|---|---|---|
| | Poor | Fair | Good |
| Junior Administrative Assistant | 1 | 1 | 3 |
| Remedial Reading Teacher | 5 | 8 | 7 |
| Reading Diagnostician | | 1 | 2 |
| Social Therapist | 2 | 3 | 1 |
| Psychologist | 1 | | |
| Total | 9 | 13 | 13 |

The mean of all ratings of CSC referral procedures is 3.0 or "Fair." This is relatively low compared to the means of ratings of other aspects of the CSC program. The following summary of respondents' comments includes suggestions for improvements in pupil selection procedures:

More definite eligibility criteria need to be established and feeder schools should be better informed of such criteria (8 respondents).

CSC staffs should be allowed to make the final decisions on acceptance of referrals (9 respondents).

CSC centers should not accept extremely slow learners or children with severe problems of social or emotional maladjustment (9 respondents).

Referrals should be submitted at the ends of semesters because a better selection can be made by teachers who have had children in their classes for a full semester (3 respondents).

Transportation of Pupils. "How would you rate present arrangements for the transportation of CSC pupils to and from your center?" This question was asked of elementary-junior high center personnel only since transportation was not required for senior high school pupils. Responses were distributed as shown below:

| Classification | Frequencies of Ratings | | |
|---|---|---|---|
| | Poor | Fair | Good |
| Junior Administrative Assistant | 1 | | 1 |
| Remedial Reading Teacher | | 4 | 11 |
| Reading Diagnostician | | 1 | 1 |
| Social Therapist | | 2 | 1 |
| Psychologist | | | 1 |
| Total | 1 | 7 | 15 |

The mean of all respondents' ratings of transportation arrangements was 4.1 or "Good." Comments and suggestions relative to transportation were:

Junior high pupils need more supervision during transportation to and from centers (3 respondents).

Procedures work very well (4 respondents).

Cooperation of sending schools is very important to efficient operation of transportation procedures (3 respondents).

Staff Specialists' Services. Four questions requested staff suggestions for the improvement of the contributions to the CSC program of the reading diagnostician,

the psychologist, the social therapist, and the remedial reading teacher. The more frequently given responses to these questions are summarized below.

There is need for improved reporting to CSC teachers of the diagnostician's findings concerning the reading deficiencies and instructional needs of individual pupils (16 respondents).

There is a need for more group discussions between diagnostician and teachers regarding diagnostic procedures, findings, and instructional implications (5 respondents).

Diagnoses of reading deficiencies should be more comprehensive (4 respondents).

The psychologist should do more reporting and interpreting the results of his findings concerning individual pupils to the CSC teachers (13 respondents).

The psychologist should devote more attention to diagnosing social and emotional adjustment problems of individual CSC pupils (3 respondents).

Each center needs a full-time psychologist (5 respondents).

The social therapist should report regularly to CSC teachers the results of conferences with pupils and parents (7 respondents).

The social therapist should devote more time to working with parents through home calls and parent group meetings (7 respondents).

The social therapist should devote more time to counseling individual CSC pupils (5 respondents).

The social therapist should work more with feeder school personnel--interpretation of CSC program and consultation concerning individual CSC pupils' needs and problems (3 respondents).

More and better inservice education for CSC teachers would contribute most to the improvement of remedial reading instruction (7 respondents).

More and better instructional materials are needed (8 respondents).

More opportunities should be provided for the sharing of ideas among staff members from the different centers (3 respondents).

There is a need to develop methods for identifying and helping children with language and perceptual skill deficiencies (2 respondents).

More consumable workbooks for CSC pupil use are needed (2 respondents).

Class Size. One question requested staff members' judgments of the optimum class size for effective remedial instruction at a CSC center.

Twenty-eight respondents recommended for elementary-junior high centers optimum class sizes ranging from 5 to 12 pupils; the mean was 7 pupils. Fourteen respondents recommended for senior high centers class sizes ranging from 5 to 10 pupils; the mean was 8 pupils. Five staff members commented that, because remedial reading instruction must be highly individualized, very small classes are essential. Three said that class size must be flexible for effective instruction--that it depends on pupils' aptitudes, abilities, and needs.

Instructional Materials. "How would you rate the adequacy of the instructional equipment, materials, and supplies available at your center?" The distribution of ratings given was as follows:

| Classification | Frequencies of Ratings | | |
|---|---|---|---|
| | Poor | Fair | Good |
| Junior Administrative Assistant | 1 | 4 | |
| Remedial Reading Teacher | 6 | 7 | 9 |
| Reading Diagnostician | 1 | 1 | 1 |
| Social Therapist | 2 | 1 | 4 |
| Psychologist | | | 1 |
| Total | 10 | 13 | 15 |

The mean of all respondents' ratings was 3.1 or "Fair." While 10 staff members (26%) gave "Poor" ratings, this may well have been partly due to unavoidable delays in the delivery of instructional equipment and supplies. Much of the needed material did not reach the centers until the summer session was under way. Most of the low ratings were given by personnel who were on the staff only through the spring semester. Four respondents stated in their comments that the adequacy

of materials was poor at first, but that it improved greatly later. Two suggested the establishment of a central CSC instructional resources center, and two said that more emphasis should be placed on the development of special instructional materials by CSC personnel.

Housing Facilities. "How would you rate the adequacy of the housing facilities at your center?" Responses were distributed as follows:

| Classification | Frequencies of Ratings | | |
|---|---|---|---|
| | Poor | Fair | Good |
| Junior Administrative Assistant | 1 | 2 | 2 |
| Remedial Reading Teacher | 3 | 10 | 8 |
| Reading Diagnostician | | | 3 |
| Social Therapist | | 4 | 3 |
| Psychologist | 1 | | |
| Total | 5 | 16 | 16 |

The mean of all respondents' ratings was 3.4, or a little above "Fair." Comment responses include several specific suggestions for the improvement of housing facilities. The comments also reveal a difference of opinion among some staff members concerning the desirability of installing partitions to separate class instruction areas. The most frequently stated comments are summarized here.

> There is an urgent need for at least one small room per CSC center to afford privacy for conferences, counseling, and individual testing (9 respondents).
>
> Partitions to separate instructional areas are badly needed (5 respondents).
>
> Fixed partitions separating the two classes taught in a transportable unit would be undesirable as this would reduce flexibility of use of space; team teaching efforts and occasional large group instruction activities require more room than would be available (3 respondents).
>
> Storage space in the transportable units is inadequate (6 respondents).
>
> More prompt maintenance service for transportable units is needed (3 respondents).

Inservice Education. "How would you rate the value to you of inservice education experiences provided for CSC personnel?" While 7 did not respond to this question, the value ratings given by the others were as follows:

| Classification | Frequencies of Ratings | | |
|---|---|---|---|
| | Poor | Fair | Good |
| Junior Administrative Assistant | 2 | 2 | 1 |
| Remedial Reading Teacher | 3 | 6 | 9 |
| Reading Diagnostician | | | 2 |
| Social Therapist | 2 | 1 | 2 |
| Psychologist | | | 1 |
| Total | 7 | 9 | 15 |

Although the mean of all respondents' ratings was 3.4, or a little higher than "Fair," the numbers of "Poor" and "Fair" ratings show that many staff members felt that inservice education opportunities could be improved. The comments relative to the question included some specific suggestions for improvement in this important area. The most frequently mentioned comments are summarized below.

> There should be more workshop type inservice education activities--for purposes of instruction and practice in the use of new materials and equipment and for development of special materials to meet the needs of individual pupils (4 respondents).
>
> Teachers should have a greater voice in the selection of inservice education experiences to be provided (3 respondents).
>
> Teachers from the different centers should have more opportunities to share ideas concerning their work (3 respondents).
>
> More opportunities to visit outstanding remedial reading clinics would be highly beneficial to all CSC personnel (3 respondents).
>
> The CSC inservice education activities did not meet teachers' needs (3 respondents).

Another question on inservice education was, "How would you rate the value of the summer workshops conducted by CSC personnel for feeder school teachers?" Twelve staff members did not answer; the others chose these value ratings:

| Classification | Frequencies of Ratings Poor | Fair | Good |
|---|---|---|---|
| Junior Administrative Assistant | 1 | 1 | 3 |
| Remedial Reading Teacher | 1 | 2 | 10 |
| Reading Diagnostician | | | 1 |
| Social Therapist | | 1 | 5 |
| Psychologist | | 1 | |
| Total | 2 | 5 | 19 |

The relatively high mean of all respondents' ratings (4.0) indicates that CSC personnel generally felt that the summer workshops were valuable experiences for the participants. The most frequently expressed staff comments relative to workshop strengths and weaknesses are listed below.

> CSC teachers were not adequately prepared for their workshop responsibilities--more thorough advance planning would increase the effectiveness of the workshops (4 respondents).
>
> The workshops are a valuable means for improving relations with feeder school personnel (3 respondents).
>
> Workshops should be longer than two weeks for maximum benefits to participants (4 respondents).

CSC Relations with Feeder Schools. "How would you rate the quality of relations between your CSC center and its feeder schools?" Staff members' responses were distributed as follows:

| Classification | Frequencies of Ratings Poor | Fair | Good |
|---|---|---|---|
| Junior Administrative Assistant | | 2 | 3 |
| Remedial Reading Teacher | 2 | 4 | 12 |
| Reading Diagnostician | | | 3 |
| Social Therapist | | 2 | 5 |
| Psychologist | | | 1 |
| Total | 2 | 8 | 24 |

The data show that 24 staff members (70% of those responding) rated as "Good" the quality of relations between their centers and the feeder schools. Eight staff

members commented that greater effort to improve and increase two-way communication with feeder school personnel would bring better cooperation from the schools in return.

Parental Cooperation. One question asked how more cooperation with parents of CSC pupils could be achieved. Staff members' responses included several suggestions which appear worthy of consideration:

> More should be done by way of interpreting the program to parents and informing them of their children's progress (5 respondents).
>
> Greater effort should be made to encourage parent visits to CSC centers (7 respondents).
>
> The CSC should have special parent-teacher conference days like those held in the schools (12 respondents).
>
> The social therapist and psychologist should make more parent contacts, including home calls (5 respondents).
>
> The social therapist and reading diagnostician should conduct parent group meetings to help parents learn to reenforce school and CSC efforts (6 respondents).

Operational Problems. One question asked staff members what problems concerning CSC operations were most urgently in need of solution during the school year 1966-67. The most frequently expressed responses were:

> More and better instructional materials, equipment, and supplies are needed (7 respondents).
>
> Provision for privacy for individual conferences at centers is needed (6 respondents).
>
> Physical examinations, especially vision and hearing tests, for all new students are needed (5 respondents).
>
> Clarification of roles of all CSC staff positions is needed (4 respondents).
>
> Improvement of inservice education for CSC teachers is needed (4 respondents).
>
> A more adequate referral and selection system is needed (3 respondents).
>
> Improved scheduling to minimize pupils' loss of time from academic subject classes at feeder schools is needed (2 respondents).

The last question in the questionnaire requested staff comments or suggestions concerning aspects of the CSC program not mentioned in previous questions. No summary of responses to this question is presented because nearly all of the comments were repetitions of comments given in response to other questions.

Summary. The means of CSC staff members' ratings on the several rating scales in the questionnaire ranged from 3.0 (fair) to 4.1 (good). Individual ratings ranged from 1 to 5 on almost every rating scale item.

Comment responses included many specific suggestions for improvement of CSC operations and services. A considerable number of the comments indicated dissatisfaction with some aspects of the program. In general these comments show the need for clearer definitions of policy, of certain procedures, and of roles.

It should be noted here that the CSC administration has already taken action on many of the above-reported staff suggestions for improvement of project operations. The need for clarification of CSC roles, policies, and procedures is being met, during the second year of the project, through:

1. regularly scheduled meetings of the director, region coordinators, and the administrators in charge of the individual centers;
2. regularly scheduled meetings of each center's staff with the region coordinator;
3. regularly scheduled meetings of CSC planning and policy making committees which include representatives from all centers and from all staff positions;
4. redefinition of some staff roles; and
5. development of a CSC handbook of policies and procedures.

The general character of the responses of administrators, teachers, and specialists serving at the different centers indicates that progress has been made toward the attainment of the project's second general objective--to gain further knowledge and skills for the effective operation of remedial communication skills centers for large numbers of disadvantaged children and youth.

Results of Interviews with Principals

Eleven principals of elementary schools participating in the CSC project were interviewed by telephone by the project evaluator in July, 1966. These principals represented schools in all three regions served by the project. All were asked one question: "On the basis of your experience with the CSC project, have you any comments, criticisms, or recommendations for improvement of this project?"

Four of the eleven principals volunteered statements to the effect that the CSC centers serving their pupils were doing a good job generally. None said that the project was not worthwhile, though several expressed suggestions for its improvement. The substance of their suggestions and recommendations is summarized below.

> CSC teachers should provide remedial instruction at the feeder schools where this is feasible, in order to avoid loss of pupils' time in transit to CSC centers (6 principals).
>
> There is need for service to many more pupils than are now enrolled in CSC classes (2 principals).
>
> More feedback to feeder school teachers concerning pupils' instructional needs is needed (2 principals).
>
> The centers should continue their present program, but also should take some referrals solely for the purpose of diagnosing reading deficiencies and recommending to feeder school teachers specific kinds of remedial help needed (1 principal).
>
> The reading program in the regular school might be further strengthened if CSC personnel worked more closely with the feeder school's reading coordinator where this position exists (1 principal).
>
> The reading program in the regular school could be strengthened if classroom reading teachers could be given opportunities to attend workshops at the CSC centers on released time from their regular teaching positions (1 principal).

During the second year, 1966-67, of CSC operations, action has been taken on several of the principals' suggestions. Supplementary CSC classrooms are being established at ten project feeder schools. A special form has been developed to

facilitate periodic reports to regular classroom teachers concerning every CSC pupil's progress and needs for specific kinds of help. Some children are now referred to a project center solely for diagnoses of their reading deficiencies. Project personnel are meeting with reading coordinators occasionally to plan for improved cooperation between CSC centers and feeder schools.

Results of Interviews with Feeder School Teachers

Some of the results of interviews with regular school teachers were presented earlier in this report (see pages 12-13). In addition to the questions concerning CSC students' attitudes and behavior in their regular school classrooms, the interview included the following question: "Have you any general comments, criticisms, or suggestions concerning the CSC program?" In response to this question, 6 of the 12 teachers interviewed expressed a desire that the CSC center would provide more feedback information to the regular classroom teacher concerning children's reading weaknesses and needs for special kinds of help. Evidence cited earlier in this report indicated that several project staff members and two principals of project feeder schools also expressed a need for more communication between CSC centers and regular school teachers concerning the reading problems of individual pupils.

CSC Services to Non-Eligible Public Schools

During the spring semester and summer sessions the CSC project served pupils from 6 public schools not on the list of schools designated as eligible for participation in the project proposal for 1965-66. Two factors which influenced the decision to serve a few non-eligible schools were the following:

1. The location of centers in transportable buildings was a compromise between need and availability of land on which to erect the buildings.

2. CSC centers were authorized to serve only schools in the administrative regions in which they were located.

One result of the location of the centers was that one elementary-junior high center was so located that there were only 9 eligible schools in the administrative region served by the center. Consequently, although there were other nearby schools in another region which were eligible for participation in Title I projects, this center served 6 non-eligible schools in its own region in order to maintain capacity enrollment in its classes. It should be noted, however, that only disadvantaged individual pupils from the 6 non-eligible schools were enrolled at the center.

These conditions suggest the need for more flexibility with respect to CSC service areas so that a project center may extend services to nearby schools which are eligible for participation in Title I projects, but located in another administrative region.

Limitations of the Process Evaluation

The evaluation of CSC processes was based primarily on responses of staff members and principals and teachers of feeder schools to questions concerning project policies and procedures. No evidence was obtained of the relative effectiveness of the various specific methods and materials used in remedial reading instruction at the centers.

## Cost Analysis

Cost analysis data are abstracted from the Special Project Office's balance sheet, dated December 31, 1966, for the Communication Skills Centers Project. This sheet shows a net budget for the period from October 13, 1965, through August 31, 1966, of $872,042 for operational expenses--salaries, supplies, travel, contract services, and fixed charges--with an additional $395,299 for capital outlay. Expenditures to December 31, 1966, had been $516,175 for operational expenses and $383,899 for capital outlay. Unpaid, but still owed, was a large

portion of the costs for fringe benefits and fixed charges.

To estimate the cost of the operation of the project from October 13, 1965 to August 31, 1966, fixed charges and fringe benefits were recomputed at about 82 percent of the amounts stated in the proposal budget, and on the basis of this recomputation, the amount still owed was determined. Other items in the operational budget were considered as paid for in full. The amounts paid for supplies were prorated over a five year period, with only 20 percent being charged to the period covered by this study.

On the basis of these computations, the operational cost of the project for its initial ten and one-half months was estimated to be close to $665,000.

The CSC centers became fully operational in April, 1966. They served about 1700 pupils during the period from April through August, 1966. By dividing the estimated operational cost of the project by the number of pupils served, an operational cost per pupil of about $390 is obtained. This estimate is high, since the operational costs of $665,000 include costs for the Language Retardation Unit which required the full-time services of two speech therapists. Moreover, the cost per pupil is high, since it includes all expenses for the preparation period from October, 1965, through March, 1966, during which staff members were hired and occupied in planning and training for the conduct of the CSC program.

No accurate data are available on the number of pupil hours of service that were given during the initial phase of the project, so no analysis can be made of cost per pupil hour of remedial treatment at the centers. On the basis of budget allowances for the year 1966-67, it is estimated that the cost per pupil hour will be about $4.15 if the centers carry the maximum pupil load under the organization procedures followed in 1965-66.

## Summary of Evaluation Findings

The product evaluation of the CSC project has revealed the following major findings:

1. Means of gains in reading achievement for almost all groups of CSC pupils were greater than would be expected for normal achieving children. (Evidence cited on pages 7-11.)

2. The majority of children in a small sample of CSC pupils showed noticeable improvements in their attitudes, efforts, and quality of school work in their regular school classrooms. (Evidence cited on pages 12-13.)

3. Most of the regular school teacher participants in the CSC summer workshops gave a high rating to the value of the workshop experiences, and the majority expected to be able to make "much" use of the remedial reading techniques learned when they returned to their own classrooms. (Evidence cited on pages 14-15.)

Process evaluation findings may be summarized as follows:

1. CSC staff members, in their responses to a questionnaire, expressed a wide variety of criticisms and suggestions concerning the operation of the project. The most frequently expressed staff-member comments were essentially as follows:

    a. Clarification of the roles of all CSC personnel is needed.

    b. More precise definitions of project policies and procedures are needed.

    c. CSC teachers should be involved to a greater extent in project planning and policy making.

    d. Improved student referral and selection procedures are needed.

    e. All three CSC specialists should do more and better reporting of their findings concerning pupils to project teachers.

    f. Improved inservice education for CSC teachers is needed.

    g. More and better instructional materials are needed.

    h. Provision for privacy for the individual conferences is needed at CSC centers.

    i. More communication between CSC personnel and feeder school teachers is necessary.

j. The CSC should hold special parent conference days.

2. Several principals of project feeder schools, in their responses to an interview question, made a number of suggestions for improvement of the CSC project. The most frequent response was that CSC service should be provided at the feeder schools, where this is feasible, in order to avoid loss of pupils' time in transit to CSC centers. The principals also made some specific suggestions of ways by which the project could further contribute to a strengthening of the reading program in regular classrooms. (Evidence cited on pages 29-30.)

3. Several project feeder school teachers of CSC pupils, in response to an interview question, expressed their desire that CSC personnel would provide the regular classroom teacher with more feedback information concerning children's reading deficiencies and needs for special kinds of help. (Evidence cited on page 30.)

The evidence obtained at the end of the first year of operation shows that progress was made toward the attainment of CSC project objectives. However, the available evidence is too limited and too inconclusive to warrant any conclusion as to whether project benefits justify costs of services rendered. The CSC centers were operational only a few months and the average period of enrollment per pupil was only about two months. More evidence is needed of reading achievement gains after longer periods of attendance by pupils and of the long range effects of CSC service on general scholastic achievement. More evidence is needed of the immediate and long-term effects of participation on pupils' attitudes toward learning, motivation, and performance in the regular classroom situation. Evidence is needed, too, of whether CSC treatment affects pupil attendance and/or dropout tendencies. Finally, more evidence is needed of the extent of the project's contribution to the strengthening of the reading program in regular school classrooms.

Appendix

| Detroit Public Schools | Communication Skills Center Project<br>Staff Evaluation Questionnaire* | Research and Development<br>August, 1966 |
|---|---|---|

Your CSC position (do not identify your unit or region) _____

Period of service in the CSC program

- ☐ second semester only
- ☐ summer session only
- ☐ second semester and summer session

Directions: On each rating scale below please circle the number which best indicates your rating. In the space provided below each rating scale write your suggestions for improvements. If your rating is high, please tell why. For questions having no rating scale, simply write your opinion in the space provided. If you need any additional space for comments, continue on the backs of pages.

1. How well was the CSC personnel organization suited to the efficient achievement of project purposes? ("personnel organization" here refers to the number and kinds of CSC personnel assigned to the centers)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Very poorly | | So-So | | Very well |

Suggestions or comments: _____

2. Have you any suggestions for changes in the assigned duties or responsibilities of any of the types of CSC personnel which you believe would improve the program?

Suggestions or comments: _____

3. What improvements can be made in the direction or administration of the CSC program (local unit, and/or CSC region, and/or total project)?

Suggestions or comments: _____

4. How can opportunities for appropriate staff member participation in planning and policy-making for CSC operations be improved?

Suggestions or comments: _____

5. How would you rate present procedures for referring pupils to the CSC program?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Unsatisfactory | | Fair | | Excellent |

Suggestions or comments: _____

*This copy of the questionnaire has been condensed by the reduction of spaces for the respondent to write in suggestions or comments.

6. How would you rate present procedures concerning acceptance of pupils in the CSC program?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Unsatisfactory | | Fair | | Excellent |

Suggestions or comments: _____

7. Elementary-junior high center personnel only: How would you rate present arrangements for transportation of CSC pupils to and from your center?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Unsatisfactory | | Fair | | Excellent |

Suggestions or comments: _____

8. How can the value of diagnoses of individual pupils' reading skill deficiencies by the reading diagnostician be increased?

Suggestions or comments: _____

9. How can the contribution of the psychologist be improved at your center?

Suggestions or comments: _____

10. How can the contribution of the social therapist be improved at your center?

Suggestions or comments: _____

11. How can the quality of remedial reading instruction be improved at your center?

Suggestions or comments: _____

12. In your judgment what is the optimum class size for effective remedial instruction at a CSC center?

Number of pupils _____ Check the type of center to which you refer

☐ Elementary-Junior High

☐ Senior High

Suggestions or comments: _____

13. How would you rate the adequacy of the instructional equipment, materials, and supplies available at your center?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Totally inadequate | | Fair | | Completely adequate |

Suggestions or comments: _____

14. How would you rate the adequacy of the housing facilities at your center?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Totally inadequate | | Moderately adequate | | Completely adequate |

Suggestions or comments: _____

15. How would you rate the value to you of inservice education experiences provided for CSC personnel?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Unsatisfactory | | Fair | | Excellent |

Suggestions or comments: _____

16. How would you rate the value of the summer workshops conducted by CSC personnel for feeder school teachers?

Suggestions or comments: _____

17. How would you rate the quality of relations between your CSC center and its feeder schools?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Unsatisfactory | | Fair | | Excellent |

Suggestions or comments: _____

18. How can more involvement of and cooperation with parents of CSC pupils be achieved?

Suggestions or comments: _____

19. What problem(s) concerning CSC operation is (are) most urgently in need of solution this fall?

_____

20. If you have any comments or suggestions concerning aspects of the CSC program not mentioned above, please write them here.

_____

Thank you very much